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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/689,756

10/21/2003

Kazuhito Sacki

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KILYK & BOWERSOX, P.L.L.C.
400 HOLIDAY COURT
SUITE 102
WARRENTON, VA 20186

EXAMINER

WONG, ALLEN C

ART UNIT

PAPER NUMBER

2621

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/689,756	Applicant(s) SAEKI, KAZUHIITO	
	Examiner Allen Wong	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 4/10/07 have been fully read and considered but they are not persuasive.

Regarding the last paragraph on page 5 to line 5 on page 6, applicant asserts that White fails to disclose an external trigger. The examiner respectfully disagrees. In figure 1, White discloses that element 140 receives a trigger sent from the outside via element 147 to start the image pickup of the workpiece. Further, element 140 is a computer that permits the user to control the machinery as set forth in White's figure 1 in that any machinery, of course, must have an initiator or initiating switch for triggering the start to the operation of the image pickup operation for obtaining images captured on camera for evaluation and processing. Thus, White discloses the use of an external trigger.

White does not specifically disclose the use of a trigger generation section for generating a predetermined number of internal triggers at predetermined intervals when said trigger receiving section receives the trigger from the outside. However, in column 1, line 66 to column 2, line 1, and column 2, lines 48-56, Arnarson teaches the utilization of generating of predetermined number of internal triggers at predetermined intervals. Therefore, it would have been obvious to one of ordinary skill in the art to combine Arnarson's teaching with White's system for obtaining the trigger generation section for generating the predetermined number of internal triggers at predetermined intervals when the trigger receiving section receives the trigger from the outside so as to

accurately, efficiently process images of objects in manufacturing applications, as suggested in column 1, lines 60-63 and column 3, line 67 to column 4, line 3.

The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Regarding lines 18-19 on page 5, and the last paragraph on page 6 of applicant's remarks, applicant contends that Arnarson fails to meet the limitation of "a trigger generation section for generating a predetermined number of internal triggers at predetermined intervals when said trigger receiving section receives the trigger from the outside". The examiner respectfully disagrees. In column 1, line 66 to column 2, line 1, and column 2, lines 48-56, Arnarson teaches the utilization of generating of predetermined number of internal triggers at predetermined intervals. Specifically at column 2, lines 53-56, Arnarson discloses there are "each interval", the images are taken by the camera 6. Thus, Arnarson clearly indicates the existence of plural intervals that are predetermined to process the images taken by camera 6. Therefore, it would have been obvious to one of ordinary skill in the art to combine Arnarson's teaching with White's system for obtaining the trigger generation section for generating the predetermined number of internal triggers at predetermined intervals when the trigger receiving section receives the trigger from the outside so as to accurately,

efficiently process images of objects in manufacturing applications, as suggested in column 1, lines 60-63 and column 3, line 67 to column 4, line 3.

The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The teachings of both White and Arnarson are reasonably combinable because both references pertain to the same image processing and product manufacturing environments.

Thus, the rejection is maintained.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over White (4,972,494) in view of Arnarson (5,184,733).

Regarding claims 1 and 4, White discloses an image processing method and system comprising:

a camera for picking up a workpiece (fig.1, element 12 and fig.2, element 74);
and

an image processing apparatus for capturing image pickup data of the workpiece picked up by said camera and performing image processing (fig.1, element 140),

said image processing apparatus including a trigger receiving section for receiving a trigger from an outside to initiate image pickup processing of the workpiece (fig.1, element 140 receives a trigger sent from the outside via element 147 to start the image pickup),

an image processing section for performing image processing with respect to each the image pickup data picked up by the camera by the trigger from the outside (fig.1, element 140 receives and processes the image data picked up by camera 12, along with the outside trigger via element 147), and

a statistical processing section for performing statistical processing of each image processing result data from the image processing section (col.4, ln.12-17).

White does not specifically disclose a trigger generation section for generating a predetermined number of internal triggers at predetermined intervals when said trigger receiving section receives the trigger from the outside. However, Arnarson discloses the implementation of generation of predetermined number of internal triggers at predetermined intervals (col.1, ln.66 to col.2, ln.1 and col.2, ln.48-56). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of White and Arnarson, as a whole, for accurately, efficiently processing images of objects in manufacturing applications (col.1, ln.60-63 and col.3, ln.67 to col.4, ln.3).

Note claims 2, 3, 5, 6, 9 and 12 have similar corresponding elements.

Regarding claims 7 and 10, White discloses statistical processing comprises generating at least one of a maximum value of variation in workpiece position, a minimum value of variation in workpiece position, and an average value of variation in workpiece position (col.4, ln.12-17 and col.8, ln.56 to col.9, ln.18; White discloses the variation of values as processed and stored in element 140).

Regarding claim 8 and 11, White discloses the statistical processing comprises eliminating image processing result data that deviates from a predetermined range (col.8, ln.56 to col.9, ln.18).

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (571) 272-7341. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Art Unit: 2621

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Allen Wong
Primary Examiner
Art Unit 2621

AW
6/17/07